

Title (en)
LUBRICATING OIL WITH HIGH OXIDATION STABILITY

Title (de)
SCHMIERÖL MIT HOHER OXIDATIONSSTABILITÄT

Title (fr)
HUILE LUBRIFIANTE A HAUTE STABILITE A L'OXYDATION

Publication
EP 1973997 A4 20090603 (EN)

Application
EP 06845921 A 20061219

Priority
• US 2006048677 W 20061219
• US 31631105 A 20051221

Abstract (en)
[origin: US2007142250A1] A lubricating oil (made from Group III base oil having a sequential number of carbon atoms) having a VI between 155 and 300, a RPVOT greater than 680 minutes, and a kinematic viscosity at 40° C. from 19.8 cSt to 748 cSt. A lubricating oil having a high VI and high RPVOT comprising: a) a Group III base oil with a sequential number of carbon atoms, and defined cycloparaffin composition or low traction coefficient, b) an antioxidant additive concentrate and c) no VI improver. A process comprising: a) hydroisomerization dewaxing of a waxy feed, b) fractionating the produced base oil, c) selecting a fraction having a VI greater than 150, and a high level of molecules with cycloparaffinic functionality or a low traction coefficient, and d) blending the fraction with an antioxidant additive concentrate. Also, a method of improving the oxidation stability of a lubricating oil.

IPC 8 full level
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CPC (source: EP KR US)
C10M 105/04 (2013.01 - KR); **C10M 105/06** (2013.01 - KR); **C10M 107/02** (2013.01 - EP US); **C10M 171/00** (2013.01 - KR); **C10M 171/02** (2013.01 - EP US); **C10M 2203/045** (2013.01 - EP US); **C10M 2205/173** (2013.01 - EP US); **C10M 2209/084** (2013.01 - EP US); **C10N 2020/02** (2013.01 - EP KR US); **C10N 2020/065** (2020.05 - EP US); **C10N 2030/10** (2013.01 - EP US); **C10N 2030/43** (2020.05 - EP US); **C10N 2040/08** (2013.01 - EP US)

C-Set (source: EP US)
C10M 2205/173 + C10M 2205/173

Citation (search report)
• [Y] CA 1120461 A 19820323 - IMP OIL LTD
• [Y] WO 02064710 A2 20020822 - SHELL INT RESEARCH [NL], et al
• [Y] US 2005133407 A1 20050623 - ABERNATHY SUSAN M [US], et al
• [A] US 2005133409 A1 20050623 - ABERNATHY SUSAN M [US], et al
• [Y] GATTO V J ET AL: "The Influence of Chemical Structure on the Physical Properties and Antioxidant Response of Hydrocracked Base Stocks and Polyalphaolefins", JOURNAL OF SYNTHETIC LUBRICATION, LEAF COPPIN PUBLISHING LTD., DEAL, KENT, GB, vol. 19, 1 April 2002 (2002-04-01), pages 3 - 18, XP007907298, ISSN: 0265-6582, [retrieved on 20060228]
• See references of WO 2007075831A2

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US 2007142250 A1 20070621; US 7662271 B2 20100216; AU 2006331635 A1 20070705; AU 2006331635 B2 20110714; BR PI0620160 A2 20120703; CN 101365773 A 20090211; CN 101365773 B 20120711; EP 1973997 A2 20081001; EP 1973997 A4 20090603; JP 2009521572 A 20090604; JP 5334591 B2 20131106; KR 20080081056 A 20080905; WO 2007075831 A2 20070705; WO 2007075831 A3 20071115; WO 2007075831 B1 20080110; ZA 200806229 B 20091125

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